

Work Order ID 84891

84891

Page 1

May-29-12 1:03:48 PM

Item ID: D209-669-013

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Skidtube LH

Start Date: 29/05/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 16/07/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 12/05/30 Tooling: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____

Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
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D209-669-013	Rev B
--------------	-------

DSI 9450	Rev A
----------	-------

100	DOCUMENT CONTROL	0.00							
-----	------------------	------	--	--	--	--	--	--	--

100

DC

Document Control

Memo

Photocopy bluefile & type labels per PPP d209-669-013 CHG003

110	Pick Kit	0.00							
-----	----------	------	--	--	--	--	--	--	--

110

Packaging

Packaging

Memo

0.00

B84924

165

relatiz

004

per ELN 12-595

for MLJ 12-7-11

SA

IX

12-7-11

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 84891

May-29-12 1:03:48 PM

84891

Page 2

Item ID: D209-669-013

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Skidtube LH

Start Date: 29/05/2012 Start Qty: 1.00 ***1***

Cust Item ID:

Required Date: 16/07/2012 Req'd Qty: 1.00 ***1***

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC4- 100% Inspect kits for completeness Memo	0.00 0.00							
130 *130* Packaging Packaging	Packaging Memo Identify and pack for shipping as per PPPD209-669-013 Location: <u>SHIP</u>	0.00 0.00							
140 *140* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00							

DAS
16

17/07/17

[Signature]

12/7/18

ME
12-07-18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Picklist Print

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Page 1

Work Order ID: 84891

84891

Parent Item: D209-669-013

D209-669-013

Parent Item Name: Skidtube LH

Start Date: 29/05/2012

Required Date: 16/07/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: New IPP 08.02.13 LL, verified by:DD
IPP Rev:B 08-05-20 chg QTY of D2570 DD verified by:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D209-669-043		Manufactured	No			110	Each	2.0000	1	1			
<div> <div>8</div> <div>*D209-669-043*</div> <div>Replacement Skidtube</div> </div> <div> <div>Location</div> <div>Mezz</div> <div>39205</div> <div>39206</div> </div> <div> <div>Loc Qty</div> <div>2</div> <div>1</div> <div>1</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> <div></div> </div>													
D2917-1		Manufactured	No			110	Each	0.0000	2	2			
<div> <div>8</div> <div>*D2917-1*</div> <div>Saddle LH</div> </div> <div> <div>Location</div> <div>ST424</div> <div>54467</div> </div> <div> <div>Loc Qty</div> <div>3</div> <div>3</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> </div>													
D2918-1		Manufactured	No			110	Each	3.0000	2	2			
<div> <div>8</div> <div>*D2918-1*</div> <div>Saddle LH</div> </div> <div> <div>Location</div> <div>ST424</div> <div>54467</div> </div> <div> <div>Loc Qty</div> <div>3</div> <div>3</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> </div>													
AN4-51A		Purchased	No			110	Each	302.0000	8	8			
<div> <div>8</div> <div>*AN4-51A*</div> <div>Bolt</div> </div> <div> <div>Location</div> <div>362</div> <div>121181</div> <div>ST361</div> <div>119798</div> <div>121584</div> </div> <div> <div>Loc Qty</div> <div>200</div> <div>200</div> <div>102</div> <div>30</div> <div>72</div> </div> <div> <div>Loc Code</div> <div></div> <div></div> <div></div> <div></div> <div></div> </div>													

84924

384937

B54467

80 12-7-11

8x

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Picklist Print

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Page 2

Work Order ID: 84891

84891

Parent Item: D209-669-013

D209-669-013

Parent Item Name: Skidtube LH

Start Date: 29/05/2012

Required Date: 16/07/2012

Start Qty: 1.00

Required Qty: 1.00

D2570

Manufactured No

110

Each

711.0000

24

24

D2570

Bushing

**

B85911 SP ~~SP~~

Location

Loc Qty

Loc Code

ST011

711

72960

41

78586

9

79493

12

81956

24

81957

400

82874

225

MS21042L4

Purchased

No

110

Each

4,095.000

24

24

MS21042L4

Nut

**

SP ~~SP~~

Location

Loc Qty

Loc Code

ST300

4095

119075

125

121011

713

121444

2957

121652

300

AN5-36A

Purchased

No

110

Each

184.0000

4

4

AN5-36A

Bolt

**

24x SP ~~SP~~

Location

Loc Qty

Loc Code

340

134

121181

34

121652

100

ST340

50

121708

50

AN960JD516

NAS1149D0563J

Purchased

No

110

Each

0.0000

8

8

AN960JD516

Washer

**

m119546 SP ~~SP~~
12-7-11

May-29-12 1:03:52 PM

Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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Picklist Print

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Page 3

Work Order ID: 84891

Parent Item: D209-669-013

Parent Item Name: Skidtube LH

84891

D209-669-013

Start Date: 29/05/2012

Required Date: 16/07/2012

Start Qty: 1.00

Required Qty: 1.00

MS21042L5

Purchased

No

110

Each

1,447.000

4

4

**

80

MS21042L5

Nut

Location

Loc Qty

Loc Code

300

500

121652

500

ST300

947

108827

8

116105

5

116548

43

117611

18

119109

865

17651

8

4x

AN4-7A

Purchased

No

110

Each

124.0000

16

16

**

m 122141 sp

AN4-7A

Bolt

Location

Loc Qty

Loc Code

ST356

124

117514

24

120770

100

AN960JD416

NAS1149D0463J

Purchased

No

110

Each

30.0000

32

32

**

m 121912 sp
12-7-11

AN960JD416

Washer

Location

Loc Qty

Loc Code

ST351

30

116289

10

119097

20

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

May-29-12 1:03:53 PM

Page 4

Work Order ID: 84891

Parent Item: D209-669-013

Parent Item Name: Skidtube LH

84891

D209-669-013

Start Date: 29/05/2012

Required Date: 16/07/2012

Start Qty: 1.00

Required Qty: 1.00

D2929

Manufactured No

110

Each

86.0000

2

2

**

D2929

Spacer

Location

Loc Qty

Loc Code

ST021

86

53564

86

110

Each

102.0000

2

2

**

D2930

Manufactured No

D2930

Spacer

Location

Loc Qty

Loc Code

ST021

102

53563

102

110

Each

6.0000

1

**

D3405-041

Manufactured No

D3405-041

Lug Assembly

Location

Loc Qty

Loc Code

ST478

6

62227

2

77000

2

82031

1

82032

1

110

Each

48.0000

4

4

**

AN4C47A

Purchased No

AN4C47A

Bolt

Location

Loc Qty

Loc Code

ST361

48

118451

6

119798

2

121009

22

121585

18

May-29-12 1:03:53 PM

Shop Packet Print

Page 4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

May-29-12 1:03:53 PM

Page 5

Work Order ID: 84891

Parent Item: D209-669-013

Parent Item Name: Skidtube LH

84891

D209-669-013

Start Date: 29/05/2012

Required Date: 16/07/2012

Start Qty: 1.00

Required Qty: 1.00

MS21043-4

Purchased No

110 Each

1,346.000

5

5

MS21043-4

Nut

**

SP

~~120~~

Location

Loc Qty

Loc Code

FG

40

104603

40

ST301

1306

119546

147

121162

659

121652

500

5x

D3405-043

Manufactured No

110 Each

2.0000

1

1

D3405-043

Lug Assembly

**

B83897 1x. SP

Location

Loc Qty

Loc Code

ST478

2

82038

2

D3407-041

Manufactured No

110 Each

27.0000

1

1

D3407-041

Tow Ring

**

B85444 12-7-16 SP
~~B83897~~ SP
~~12-7-11~~

Location

Loc Qty

Loc Code

ST463

27

82067

6

82068

19

82108

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

May-29-12 1:03:53 PM

Page 6

Work Order ID: 84891

Parent Item: D209-669-013

Parent Item Name: Skidtube LH

84891

D209-669-013

Start Date: 29/05/2012

Required Date: 16/07/2012

Start Qty: 1.00

Required Qty: 1.00

D3456-1

Manufactured No

110

Each

156.0000


1

1

D3456-1

Washer

**

SP 

Location

Loc Qty

Loc Code

FG

7

25701

7

ST044

149

80252

1

81876

48

83584

100

D3417-5

Manufactured No

110

Each

78 0000


2

2

D3417-5

Washer

**

1K
B84943 SP
12-7-11 

Location

Loc Qty

Loc Code

ST042

78

78842

28

83318

50

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D209-669 REV. B

INSTRUCTIONS:

- 1) FOR D209-669-011/-012/-013/-014 SKID TUBES @ CHANGE 003 AND SUBSEQUENT, MODIFY THE FOLLOWING:
 - a) REPLACE THE D2968-041 TOW RING WITH THE D3407-041 TOW RING ASSEMBLY.
 - b) REPLACE THE D2736-1 AND D2736-3 GHW LUGS WITH THE D3405-041 AND D3405-043 LUG ASSEMBLIES.
 - c) AMEND THE PARTS LIST IN SECTION 5.0 OF INSTALLATION INSTRUCTIONS IIN-D209-669 REV. B AS SHOWN ON PAGE 2 OF THIS DSI.

NOTE: ALL INSTALLATION FASTENERS FOR THE ABOVE CHANGES HAVE BEEN UPDATED. SEE THE AMENDED PARTS LIST ON PAGE 2 FOR DETAILS.

SHOP COPY
 RETURN TO
 ENGINEERING
 UNCONTROLLED COPY
 SUBJECT TO AMENDMENT
 WITHOUT NOTICE
 WORK ORDER
 NO. 24891 MJS
 12/05/30

A	NEW ISSUE	AJS	09.02.24
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9450	SHEET 1 OF 3
APPROVED		TITLE	SCALE
DE APPR.		SKIDTUBE INSTALLATIONS	NTS
DATE	09.02.24		
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

5.0 PARTS LIST

ITEM	QTY -011	QTY -012	QTY -013	QTY -014	QTY -041	QTY -043	PART NUMBER	DESCRIPTION
	X						D209-669-011	SKIDTUBE INSTALLATION, LH (AH-1W/J)
		X					D209-669-012	SKIDTUBE INSTALLATION, RH (AH-1W/J)
			X				D209-669-013	SKIDTUBE INSTALLATION, LH (AH-1P/F/S)
				X			D209-669-014	SKIDTUBE INSTALLATION, RH (AH-1P/F/S)
	1	1			X		D209-669-041	REPLACEMENT SKIDTUBE (AH-1W/J)
			1	1		X	D209-669-043	REPLACEMENT SKIDTUBE (AH-1P/F/S)

IS:

50	4	4	1	1			D3405-041	LUG ASSEMBLY
51	8	8	4	4			AN4C47A	BOLT
52	16	16	8	8			D2570	BUSHING
53	8	8	4	4			MS21043-4	NUT
54			1	1			D3405-043	LUG ASSEMBLY
60	1	1	1	1			D3407-041	TOW RING ASSEMBLY
61	1	1	1	1			D3456-1	WASHER
62	1	1	1	1			MS21043-4	NUT
63	2	2	2	2			D3417-5	WASHER

WAS:

50	4	4	1	1			D2736-1	GHW LUG
51	8	8	4	4			AN4-46A	BOLT
52	16	16	8	8			D2570	BUSHING
53	8	8	4	4			MS21042L4	NUT (OR MS21042-4)
54			1	1			D2736-3	GHW LUG
60	1	1	1	1			D2968-041	TOW RING
61	1	1	1	1			AN970-4	WASHER
62	1	1	1	1			MS21042L4	NUT (OR MS21042-4)

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9450	SHEET 2 OF 3
APPROVED		TITLE	SCALE
DE APPR.		SKIDTUBE INSTALLATIONS	NTS
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21891

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

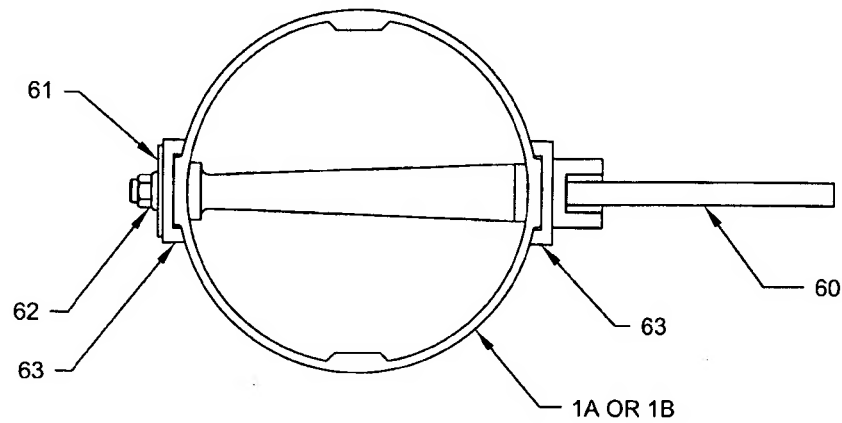
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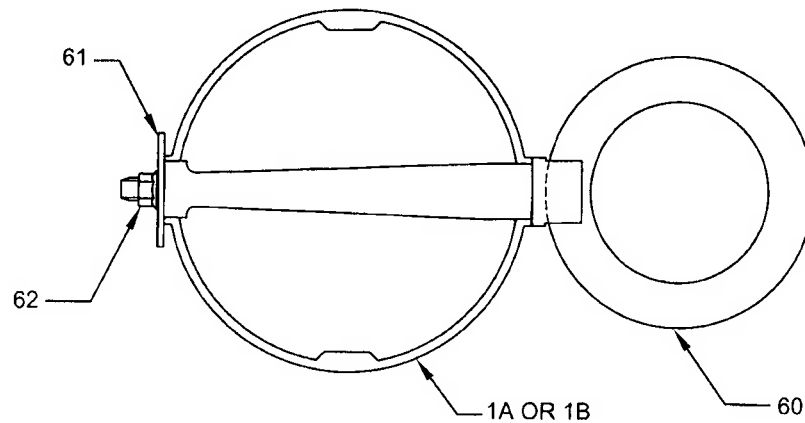
• NOTE: Date & initial all entries

INSTALL TOW RING ASSEMBLY AS SHOWN BELOW (REFER TO SECTION F-F OF IIN-D209-669 REV. B.

IS:



WAS:



NO PICTORIAL CHANGE REQUIRED FOR GROUND HANDLING WHEEL LUG CHANGES.

DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9450	SHEET 3 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	SKIDTUBE INSTALLATIONS	NTS
DATE	09.02.24	COPYRIGHT © 2009 BY DART AEROSPACE LTD <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD</small>	

84891
16818

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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